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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,162	03/26/2004	Francisc Sandulescu	NEWT . P0107US	1975
23908 7590 02/07/2007 RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115			EXAMINER UNELUS, ERNEST	
			ART UNIT 2181	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/811,162

Applicant(s)

SANDULESCU ET AL.

Examiner

Ernest Unelus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/04/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

The instant application having Application No. 10/811,162 had a total of 22 preliminary amended claims pending in the application; after amendment, we now have a total of 20 of claims. There are now 3 independent claims and 17 dependent claims, all of which are ready for examination by the examiner. Claims 8 and 9 have been cancelled.

### **I. INFORMATION CONCERNING OATH/DECLARATION**

#### **Oath/Declaration**

1. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

### **II. INFORMATION CONCERNING DRAWINGS**

#### **Drawings**

2. The applicant's drawings submitted are not acceptable for examination purposes.

### **III. ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT**

3. As required by M.P.E.P. 609(C), the applicant's submissions of the Information Disclosure Statement dated June 04, 2004 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P 609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

#### **IV. OBJECTIONS TO THE CLAIMS**

4. **Claims 16-20**, are objected to as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per **claims 16-20**, the phrase “the USB interfaces” in Page 5 of 9, line 4 of claim 16 makes this limitation indefinite because the claim discloses only one USB interface. Appropriate correction is required

#### **V. REJECTIONS BASED ON PRIOR ART**

##### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. **Claim 1** is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No.

10/860,888 in view Ahern et al. (EP 1 075 111).

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6. Initially, it should be noted that the present application and Application No. 10/860,888, have the same inventive entity. The assignee for both applications is Network Technologies Inc.

7. Claimed subject matter in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as noted below. *See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).*

8. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See MPEP § 804.

9. Claim 1 is compared to claim 1 of application 10/860,888 in the following table:

Instant Application	Application 10/860,888
<p>A <b>peripheral switch</b> comprising:</p> <p>a plurality of sets of keyboard and mouse interfaces, each set of keyboard and mouse interfaces having keyboard interface and mouse interface;</p> <p>a plurality of sets of host interfaces, each set of host interfaces having a host keyboard and mouse interface; at least one non-keyboard and non-mouse <b>USB peripheral interface</b>; at least one host USB interface;</p> <p>and a master controller configured to switch at least one of the sets of keyboard and mouse.</p>	<p>A <b>distributed KVM switch</b> comprising:</p> <p>a host unit communicably coupleable to a non-USB <b>channel</b> and at least one USB host and video source, the host unit comprising</p> <p>a plurality of sets of host interfaces, each set of host interfaces having a host keyboard and mouse interface and a host video interface;</p> <p>a device unit communicably coupleable to the non-USB channel and <u>at least one</u> USB keyboard and mouse and video display, the device unit comprising a plurality of sets of KVM interfaces, each set of KVM interfaces having a USB keyboard and mouse interface and a video interface;</p> <p>and a master controller configured to switch at least one of the sets of KVM</p>

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interfaces and at least one of the non-keyboard and non-mouse USB peripheral interfaces among the host interfaces;	interfaces among the host interfaces;
wherein a keyboard and mouse host is emulated to the keyboard interface and the mouse interface;	wherein a USB host is emulated to each of the USB keyboard interfaces and mouse interfaces;
and wherein a keyboard and a mouse is emulated to the host interface; (claim 1)	and wherein a USB keyboard and mouse are emulated to the host interface; (claim 1)

*This is a provisional double patenting rejection since the conflicting claims have not yet been patented. The double patenting rejection is also applicable to other claims in the application; for example;*

stant Application	Application 10/860,888
The peripheral switch of claim 2 wherein the at least one user controller and the at least one computer controller are communicably coupled (claim 4).	The distributed KVM switch of claim 3 wherein the at least one user controller and the at least one computer controller are communicably coupleable via at least the non-USB channel (claim 6).
The peripheral switch of claim 2 wherein the master controller is configured to select which of the at least one user controllers and which of the at least one computer controllers will communicate with each other (claim 5).	The distributed KVM switch of claim 3 wherein the master controller is configured to select which of the at least one user controllers and the which of the at least one computer controllers will communicate with each other (claim 7).

**And many others**

Claim 1 from the instant applicant doesn't specifically discloses a non-USB channel.

Ahern discloses a non-USB channel (see backplane 45 of fig.1, as describe in paragraphs 0019 and 0062 being a non-USB device).

Applicant number 10/811162 and Ahern et al. (EP 1 075 111) are analogous art because they are from the same field of endeavor of how to increase the connectivity of a switch device.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by the instant application to include the high end switching system as taught by Ahern.

The motivation for doing so would have been because Ahern teaches that the high end KVM switching system improved performance characteristics for interconnecting a relatively large number of computer user terminals

Therefore, it would have been obvious to combine Ahern et al. (EP 1 075 111) with Applicant number 10/811162 for the benefit of creating a peripheral switch to obtain the invention as specified in claim 1.

**Claim Rejections - 35 USC § 103**

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1-7 and 10-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahern et al. (EP 1 075 111) in view of King et al. (US 2003/0131127).

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12. As per claims 1 and 10, Ahern discloses a peripheral switch (see **switching hub 40 of fig. 1, as describe in paragraph 0006**) comprising: a plurality of sets of keyboard and mouse interfaces (**user interface modules 17-32 of fig. 1, as describe in paragraph 0006**), each set of keyboard and mouse interfaces having keyboard interface and mouse interface (see **fig. 1 and paragraph 0006, which also describe the user interface modules 17-32 for receiving signals**); a plurality of sets of host interfaces (**terminals 1-16 of fig. 1**), each set of host interfaces having a host keyboard and mouse interface (see **paragraph 0006, which also discloses keyboard interface 1b and the mouse (cursor control device) interface 1c**); at least one non-keyboard and non-mouse USB peripheral interface (see **video interface 1a, as describe in paragraph 0006, which is a non-keyboard interface**); a master controller (**the 'master central processing unit', as discloses in paragraphs 0004 and 0022**) configured to switch at least one of the sets of keyboard and mouse interfaces and at least one of the non-keyboard and non-mouse peripheral interfaces among the host interfaces (see **paragraph 0006**); wherein a keyboard and mouse host is emulated to the keyboard interface and the mouse interface (see **paragraph 0030, which discloses emulation**); and wherein a keyboard and a mouse is emulated to the host interface (see **paragraph 0030, which discloses emulation**), Ahern fail to disclose the peripheral switch device comprises also at least one host USB peripheral interface.

King discloses a KVM and peripheral switch device comprises a host USB peripheral interface and a master controller that is configured to switch also at least one of the USB peripheral among the host interfaces (see **fig. 2 of King and paragraph 0023**).



Ahern et al. (EP 1 075 111) and King et al. (US 2003/0131127) are analogous art because they are from the same field of endeavor of how to increase the connectivity of a switch device.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by Ahern and to include also at least one USB peripheral interface in the KVM switch the master controller configured to switch also at least one of the USB peripheral among the host interfaces as taught by King.

The motivation for doing so would have been because King teaches that [**"The OCC keyboard 32 and mouse 34 devices may be PS/2 devices or USB devices or a combination of both. For example, it is possible to simultaneously attach both a PS/2 keyboard and a USB mouse. Because the USB protocol allows multiple devices to be attached to a single USB port by using a commercially available device known as a USB hub, multiple PS/2 devices and USB devices may be attached to a KVM unit 12"** (paragraph 0023)].

Therefore, it would have been obvious to combine King et al. (US 2003/0131127) with Ahern et al. (EP 1 075 111) for the benefit of creating a peripheral switch to obtain the invention as specified in claims 1 and 10.

13. As per **claim 2**, the combination of Ahern and King disclose the peripheral switch of claim 1 (see rejection to claim 1 above): "at least one user controller (**the FPGA crosspoint switch of the of the switch module 41 located on the user side**) communicably coupled to the master controller (see paragraph 0022, which also discloses "these crosspoint switches are

preferably controlled by the main CPU. The logic device is preferably accessed by a data bus, an address bus and some control signals. This interface may be compatible to a standard microcontroller interface or a serial control link. This device is preferably programmable from the main CPU of the system". Therefore, the master controller and the user controller is coupled). and at least one of the keyboard and mouse interfaces (see fig. 1 and paragraph 0006), the user controller being configured to emulate a keyboard and mouse host (see paragraph 0030, which discloses emulation); and at least one computer controller (the FPGA crosspoint switch of the of the switch module 41 located on the host computer side) communicably coupled to the master controller and at least one of the sets of host keyboard and mouse interfaces, the computer controller being configured to emulate a keyboard and a mouse." (see paragraph 0030, which discloses emulation) (with respect to this limitation, Page 7 and 8 of Applicant's specification discloses the host controller, device controller, user controller and the computer controller to be the same controller, such as a field programmable gate arrays; similarly, Ahern discloses multiple switch modules 41 with the FPGA. See fig. 2 and paragraph 0006).

14. As per claim 3, the combination of Ahern and King disclose the peripheral switch of claim 2 (see rejection to claim 2 above): "wherein the at least one user controller and the at least one computer controller are the same controller" (with respect to this limitation, Page 7 and 8 of Applicant's specification discloses the host controller, device controller, user controller and the computer controller to be the same controller, such as a field programmable gate arrays; similarly, Ahern discloses multiple switch modules 41 with the FPGA. See fig. 2 and paragraph 0006).

15. As per claim 4, the combination of Ahern and King disclose the peripheral switch /of claim 2 (see rejection to claim 2 above): “wherein the at least one user controller and the at least one computer controller are communicably coupled” [with respect to this limitation, Ahern discloses the user interface module as the user controller and the computer interface module as the computer controller, which are communicably coupled (see fig. 1)].

16. As per claim 5, the combination of Ahern and King disclose the peripheral switch of claim 2 (see rejection to claim 2 above): “ wherein the master controller is configured to select which of the at least one user controllers and which of the at least one computer controllers will communicate with each other [with respect to this limitation, Ahern discloses emulation, which is perform by the master controller (switch module 41), between the at least one user controllers (user interface module) and with the at least one computer controllers (computer interface module) will communicate with each other (see paragraph 0030)].

17. As per claims 6 and 17, the combination of Ahern and King disclose the peripheral switch of claim 5 (see rejection to claim 5 above): “wherein the master controller is configured to direct the selected user controller and the selected computer controller to communicate with each other” [with respect to this limitation, Ahern discloses emulation, which is perform by the master controller (switch module 41), between the selected user controllers (user interface module) with the selected computer controllers (computer interface module) to communicate with each other (see paragraph 0030)].

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18. As per **claim 7**, the combination of Ahern and King disclose the peripheral switch of claim 5 (see rejection to claim 5 above): “wherein the master controller is configured to select user controllers based on received user identification information and computer controllers based on computer identification information”[with respect to this limitation, (see paragraphs 0034 and 0047)].

19. As per **claim 11**, the combination of Ahern and King disclose the peripheral device switch of claim 10 (see rejection to claim 10 above): “wherein the switch is a crosspoint matrix switch” [with respect to this limitation, (see fig. 1, which is a crosspoint matrix switch, as known in the art)]

20. As per **claims 12 and 18**, the combination of Ahern and King disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “wherein the peripheral switch is compatible with both USB 1.x and USB 2.x.” [with respect to this limitation, King discloses, in paragraph 0023, “Because the USB protocol allows multiple devices to be attached to a single USB port by using a commercially available device known as a USB hub”. In other word, With the USB hub, someone is able to use a USB 1.x or a USB 2.x. for the motivation discloses above in claim 1]

21. As per **claims 13 and 19**, the combination of Ahern and King disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “wherein the peripheral switch is capable of concurrently and independently switching keyboard and mouse interfaces between keyboard and mouse host interfaces and non-keyboard and non-mouse USB peripheral interfaces between host

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USB interfaces [with respect to this limitation, in paragraphs 0022 and 0045, Ahern discloses a concurrently and an independently step of switching keyboard and mouse interfaces between keyboard, mouse, video (non-keyboard) host interfaces and peripheral interfaces between host peripheral interfaces].

22. As per claims 14 and 20, the combination of Ahern and King disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “wherein the keyboard interface and mouse interface are each selected from the group consisting of: SUN, PS/2, MAC, USB, Universal, and combinations thereof” [with respect to this limitation, King discloses a PS/2, (see paragraph 0023)]

23. As per claim 15, the combination of Ahern and King disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “further comprising a user interface selected from the group consisting of: buttons, RS232 commands, Ethernet, remote toggle switch, on-screen display, and combinations thereof” [with respect to this limitation, King discloses a PS/2, (see paragraph 0023)].

24. As per claim 16, Ahern discloses a peripheral switch (see switching hub 40 of fig. 1, as describe in paragraph 0006) comprising: a plurality of sets of keyboard and mouse interfaces (user interface modules 17-32 of fig. 1, as describe in paragraph 0006), each set of keyboard and mouse interfaces having keyboard interface and mouse interface (see fig. 1 and paragraph 0006, which also describe the user interface modules 17-32 for receiving signals); at least one user controller (the FPGA crosspoint switch of the of the switch module 41 located on

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the user side) communicably coupled to at least one of the sets of keyboard and mouse interfaces (see fig. 1), the user controller being configured to emulate a keyboard and mouse host (see paragraph 0030, which discloses emulation); a plurality of sets of host interfaces (terminals 1-16 of fig. 1), each set of host interfaces having a host keyboard and mouse interface (see paragraph 0006, which also discloses keyboard interface 1b and the mouse (cursor control device) interface 1c); at least one computer controller (the FPGA crosspoint switch of the of the switch module 41 located on the host computer side) communicably coupled to at least one of the sets of host interfaces (see fig. 1), the computer controller being configured to emulate a keyboard and a mouse (see paragraph 0030, which discloses emulation); at least one non-keyboard and non-mouse USB peripheral interface (see video interface 1a, as describe in paragraph 0006, which is a non-keyboard interface); and a peripheral switch (switching hub 40 of fig. 1, as describe in paragraph 0006) communicably coupled to at least one of the non-keyboard and non-mouse peripheral interfaces and to at least one of the host USB peripheral interfaces (see fig. 1) and configured to switch the non-keyboard and non-mouse USB peripheral interfaces (see paragraphs 0022 and 0030); a master controller (the 'master central processing unit', as discloses in paragraphs 0004 and 0022) communicably coupled to the user controller, the computer controller, the peripheral switch, (see figures 1 and 2; (with respect to this limitation, Page 7 and 8 of Applicant's specification discloses the host controller, device controller, user controller and the computer controller to be the same controller, such as a field programmable gate arrays; similarly, Ahern discloses multiple switch modules 41 with the FPGA. See fig. 2 and paragraph 0006)) and configured to switch at least one of the sets of keyboard and mouse interfaces and at least one of the non-keyboard

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and non-mouse peripheral interfaces between the host peripheral interfaces (see **fig. 1 and paragraph 0030**; Ahern fail to disclose the peripheral switch device comprises also at least one USB peripheral interface.

King discloses the peripheral switch device comprises also at least one USB peripheral interface, and the master controller is configured to switch also at least one of the USB peripheral among the host interfaces (see **fig. 2 of King and paragraph 0023**).

Ahern et al. (EP 1 075 111) and King et al. (US 2003/0131127) are analogous art because they are from the same field of endeavor of how to increase the connectivity of the KVM switch.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by Ahern and to include also at least one USB peripheral interface in the KVM switch and the master controller is configured to switch also at least one of the USB peripheral among the host interfaces as taught by King.

The motivation for doing so would have been because King teaches that [**"The OCC keyboard 32 and mouse 34 devices may be PS/2 devices or USB devices or a combination of both. For example, it is possible to simultaneously attach both a PS/2 keyboard and a USB mouse. Because the USB protocol allows multiple devices to be attached to a single USB port by using a commercially available device known as a USB hub, multiple PS/2 devices and USB devices may be attached to a KVM unit 12"** (paragraph 0023) ].

Therefore, it would have been obvious to combine King et al. (US 2003/0131127) with Ahern et al. (EP 1 075 111) for the benefit of creating a peripheral switch to obtain the invention as specified in claim 16.

25. As per **claim 21**, Ahern discloses a method for switching at least one keyboard interface, at least one mouse interface, and at least one non-keyboard, and non-mouse USB interface between host interfaces comprising (see **fig. 1 and paragraph 0006, which also describe the user interface modules 17-32 for receiving signals. See also video interface 1a, as describe in paragraph 0006, which is a non-keyboard interface**); emulating a keyboard and a mouse to each host interface (see **paragraph 0030, which discloses emulation**); emulating a host to each keyboard interface and mouse interface (see **paragraph 0030, which discloses emulation**); receiving a switching command at a controller (see **paragraph 0022**), the switching command containing identification information (see **address, as discloses in paragraph 0047**); and using the identification information to connect at least one of the keyboard interfaces, at least one of the mouse interfaces, at least one of the video interfaces, and at least one of the peripheral interfaces to at least one of the host interfaces (see **paragraphs 0034 and 0047**). Ahern fail to disclose the peripheral switch device comprises also at least one USB peripheral interface.

King discloses the peripheral switch device comprises also at least one USB peripheral interface, and the master controller is configured to switch also at least one of the USB peripheral among the host interfaces (see **fig. 2 of King and paragraph 0023**).

Ahern et al. (EP 1 075 111) and King et al. (US 2003/0131127) are analogous art because they are from the same field of endeavor of how to increase the connectivity of the KVM switch.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by Ahern and to include also at least one USB



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peripheral interface in the KVM switch and the master controller is configured to switch also at least one of the USB peripheral among the host interfaces as taught by King.

The motivation for doing so would have been because King teaches that [**“The OCC keyboard 32 and mouse 34 devices may be PS/2 devices or USB devices or a combination of both. For example, it is possible to simultaneously attach both a PS/2 keyboard and a USB mouse. Because the USB protocol allows multiple devices to be attached to a single USB port by using a commercially available device known as a USB hub, multiple PS/2 devices and USB devices may be attached to a KVM unit 12” (paragraph 0023) ].**

Therefore, it would have been obvious to combine King et al. (US 2003/0131127) with Ahern et al. (EP 1 075 111) for the benefit of creating a KVM switch to obtain the invention as specified in claim 21

26. As per **claim 22**, the combination of Ahern and King disclose the method of claim 21 (see rejection to claim 21 above): “further comprising: (a) determining whether non-keyboard, and non-mouse USB interface is to be switched concurrently with the keyboard interface and the mouse interface; (b) concurrently switching non-keyboard, and non-mouse USB interface with the keyboard interface and the mouse interface upon a positive determination in step (a) [**with respect to this limitation, in paragraph 0045, Ahern discloses a concurrent step of switching keyboard and mouse interfaces between keyboard and mouse host interfaces**].

## **VI. RELEVANT ART CITED BY THE EXAMINER**

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27. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

28. The following reference teaches of how to increase the connectivity of a KVM switch.

**U.S. PATENT NUMBER**

US pub. 2002/0143996

US pat. 6,671,756

**VII. CLOSING COMMENTS**

**Conclusion**

**a. STATUS OF CLAIMS IN THE APPLICATION**

29. The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

**a(1) CLAIMS REJECTED IN THE APPLICATION**

**a (1) CLAIMS REJECTED IN THE APPLICATION**

30. Per the instant office action, claims 1-7 and 10-22 have received a first action on the merits and are subject of a first action non-final.

**b. DIRECTION OF FUTURE CORRESPONDENCES**

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-

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8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

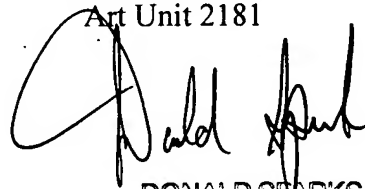
**IMPORTANT NOTE**

32. If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Donald Sparks, can be reached at the following telephone number: Area Code (571) 272-4201.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PMR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217- 91 97 (toll-free).

January 29, 2006

Ernest Unelus  
Patent Examiner  
Art Unit 2181

A handwritten signature in black ink, appearing to read 'Donald Sparks', is written over the printed name.

DONALD SPARKS  
SUPERVISORY PATENT EXAMINER